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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/556,308	04/24/2000	Hiroaki Kubo	018656-124	7095

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EXAMINER

JERABEK, KELLY L

ART UNIT PAPER NUMBER

2612

DATE MAILED: 03/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/556,308

Applicant(s)

KUBO, HIROAKI

Examiner

Kelly L. Jerabek

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 September 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 and 11-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 8,9 and 11-15 is/are allowed.
- 6) ☒ Claim(s) 1,2 and 5-7 is/are rejected.
- 7) ☒ Claim(s) 3 and 4 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Response to Arguments

Applicant's arguments filed 9/3/2004 have been fully considered but they are not persuasive.

Response to Remarks:

Applicant contends (Amendment, page 6) that the combination of the Takagi and Yahav patents do not teach a plurality of light measuring elements at different positions that detect the brightness of a common area on an image sensing surface. Applicants state that the Takagi reference includes light measuring elements (18a-18e) that receive light reflected from an image-sensing surface at different angles. However, applicants state that the light measuring elements disclosed by Takagi are associated with different areas of the film surface therefore they do not detect the brightness of a common area as claimed. The Examiner respectfully disagrees. Takagi discloses a photometric apparatus for a camera (fig. 19). The disclosed photometric apparatus includes an optical system through which light from a photographic subject passes (fig. 13: LE), and a light emission system for illuminating the photographic subject (fig. 19: 16, 29). In addition the photometric apparatus includes a plurality of light measuring elements provided at different positions (fig. 11A: 18a-18e). These light measuring elements

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sense light that is reflected by the subject and passes through the photographic system (col. 7, lines 2-32). In addition, each of the plurality of light measuring elements (18a-18e) receives the light reflected from the image-sensing surface (FI) at different angles relative to the image-sensing surface (FI) (col. 7, lines 25-30; fig. 11a). **Although the light-measuring elements (18a-18e) receive light that is reflected from different portions of the film surface, it can be seen in figure 11A that there is an area of the film surface where all of the light-measuring elements (18a-18e) receive the light. The Examiner is reading the area where the sensor reception ranges intersect as a “common area”.** Therefore, the Takagi reference discloses a plurality of light-measuring elements that are provided at different positions and detect a brightness of a common area on an image-sensing surface at different respective angles.

Applicant's argument, see Amendment pages 7-8 filed 9/3/2004 with respect to claim 3 have been fully considered and **are persuasive**. The rejection of claim 3 has been withdrawn.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1, 2, and 5-7 rejected under 35 U.S.C. 103(a) as being unpatentable over Takagi US 5,400,112 in view of Yahav US 6,445,884.

Re claim 1, Takagi discloses a photometric apparatus for a camera (fig. 19). The disclosed photometric apparatus includes an optical system through which light from a photographic subject passes (fig. 13: LE), and a light emission system for illuminating the photographic subject (fig. 19: 16, 29). In addition the photometric apparatus includes a plurality of light measuring elements provided at different positions (fig. 11A: 18a-18e). These light measuring elements sense light that is reflected by the subject and passes through the photographic system (col. 7, lines 2-32). In addition, each of the plurality of light measuring elements (18a-18e) receives the light reflected from the image-sensing surface (FI) at different angles relative to the image-sensing surface (FI) (col. 7, lines 25-30; fig. 11a). **Although the light-measuring elements (18a-18e) receive light that is reflected from different portions of the film surface, it can be seen in figure 11A that there is an area of the film surface where all of the light-measuring elements (18a-18e) receive the light. The Examiner is reading the area where the sensor reception ranges intersect as a "common area".** The photometric apparatus also includes a controller that controls the light emission system based on the light received by the light measuring elements (col. 10, lines 43-58; fig. 19: 26, 29). However, Takagi discloses that light passing through the optical system is received by a photographic film and not by an image sensor.

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Yahav discloses a camera with through-the-lens lighting (fig. 1A). The camera includes a photosensitive surface (fig. 1A: 22). Yahav states that the photosensitive surface (fig. 1A: 22) may comprise photographic film or a CCD (col. 10, lines 56-60). Using a CCD as a photosensitive surface instead of photographic film is advantageous because it allows images to be captured electronically. Therefore, it would have been obvious for one skilled in the art to have been motivated to include an image sensor such as a CCD as taught in Yahav in the photometric apparatus disclosed by Takagi. Doing so would provide a means for controlling the flash emission of a camera using an alternate photosensitive surface such as a CCD (Yahav: col. 10, lines 56-60).

Re claim 2, the photometric apparatus disclosed by Takagi includes a weighting value calculation means (fig. 19: 26) and a flash controller (fig. 19: 29). The weighting value calculation means (26) sets an integration amount for each light measuring element (col. 9, lines 60-67). Next, photometric regions at which the reflection rate distribution rate is very high or very low are extracted (col. 10, lines 1-23). Finally, the main flashing by the flash apparatus (fig. 19: 16) is carried out based on the results of the weighting light adjustment circuit (fig. 19: 28). See also (col. 10, lines 24-46).

Re claim 5, see claim 2. The voltage (E_n) corresponding to the weighting values are input into the weighting light adjustment circuit (fig. 19: 28) and cause the flashing apparatus (fig. 19: 16) to flash (col. 10, lines 43-46). The weighting value is the same as an average of all of the selected elements.

Re claim 6, the light measuring elements (fig. 2: 2) disclosed by Takagi are located in a space between the optical system (fig. 2: LE) and the photographic film (fig. 2: FI). See also (col. 2, lines 8-16). However, Takagi discloses that light passing through the optical system is received by photographic film and not an image sensor.

Yahav discloses a camera with through-the-lens lighting (fig. 1A). The camera includes a photosensitive surface (fig. 1A: 22). Yahav states that the photosensitive surface (fig. 1A: 22) may comprise photographic film or a CCD (col. 10, lines 56-60). Using a CCD as a photosensitive surface instead of photographic film is advantageous because it allows images to be captured electronically. For this reason, it would have been obvious to include an image sensor such as a CCD as taught in Yahav in the photometric apparatus disclosed by Takagi. Doing so would provide a means for controlling the flash emission of a camera using an alternate photosensitive surface such as a CCD (Yahav: col. 10, lines 56-60).

Re claim 7, see claim 6. The light measuring elements disclosed by Takagi sense light that is reflected at the film surface (fig. 2: FI). See also (col. 2, lines 8-16).

Allowable Subject Matter

Claims 8-9 and 11-15 allowed.

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The following is a statement of reasons for the indication of allowable subject matter: the prior art of record fail to anticipate or render obvious the following technical features as recited in the highlighted claims:

Referring to claims 8-9 and 11-15, the prior art fails to teach or suggest "... a light measuring element which is located in a space between said optical system and said image sensor such that the image sensing surface of said image sensor is located outside the photoreception range of said light measuring element to thereby sense flare light within said space; and a controller which controls the operation of said light emission system in accordance with the light sensed by said light measuring element".

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Okamura (US 6,035,135) discloses control of a flash device included in or connected to an image-sensing device. The information regarding controlling a flash of a camera using a photometry circuit is pertinent material.

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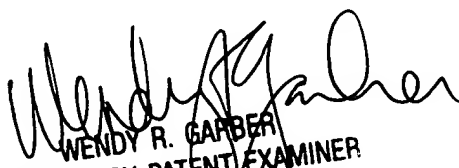
Fukuhara et al. (US 4,476,383) discloses a photometry device for obtaining exposure information. The information regarding performing an operation on the basis of an average output of photometry devices is pertinent material.

Contacts

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kelly L. Jerabek whose telephone number is (571) 272-7312. The examiner can normally be reached on Monday - Friday (8:00 AM - 5:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wendy Garber can be reached on (571) 272-7308. The fax phone number for submitting all Official communications is 703-872-9306. The fax phone number for submitting informal communications such as drafts, proposed amendments, etc., may be faxed directly to the Examiner at (571) 273-7312.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


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